

# Tropical Cyclone *Quick Reference Guide*



U.S. Navy Atlantic Tropical Web Site: <https://www.nlmoc.navy.mil/>

Maritime Operations Watch Floor: 757.444.7750

DSN 564-7750

Naval Meteorology & Oceanography Center - Norfolk, 9141 Third Ave, Norfolk VA 23511-2394 email: [cdo@nlmoc.navy.mil](mailto:cdo@nlmoc.navy.mil)

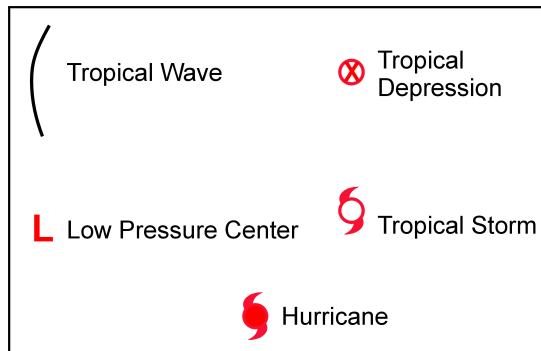
**Atlantic** Tropical Cyclone Season: 01 June - 30 November **East Pacific** Tropical Cyclone Season: 15 May - 30 November

## 2005 Atlantic Tropical Cyclone Names

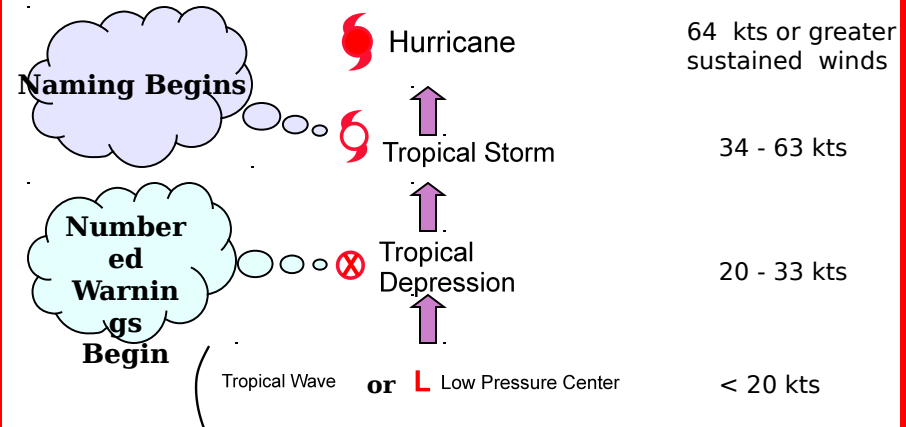
Arlene  
Bret  
Cindy  
Dennis  
Emily  
Franklin  
Gert  
Harvey  
Irene  
Jose  
Katrina

Lee  
Maria  
Nate  
Ophelia  
Philippe  
Rita  
Stan  
Tammy  
Vince  
Wilma

## Tropical Cyclone Symbols



## Stages of Tropical Cyclone Development

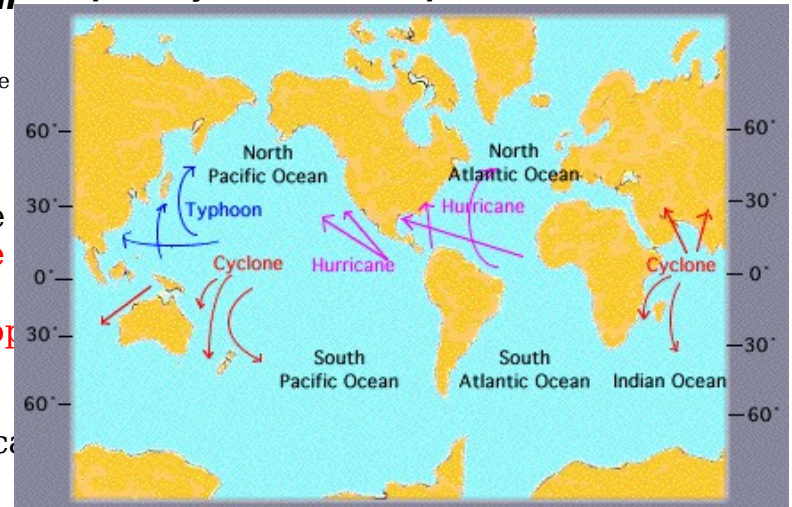


## Saffir-Simpson Scale - Hurricane Destruction Potential

Category	Sustained Wind Speed		Storm Surge	Damage
	(knots)	(mph)	(ft)	
1	64 - 82	74 - 95	4 - 5	Minimal
2	83 - 95	96 - 110	6 - 8	Moderate
3	96 - 113	111 - 130	9 - 12	Extensive
4	114 - 135	131 - 155	13 - 18	Extreme
5	> 135	> 155	> 18	Catastrophic

NOTE: Category 3, 4, & 5 are considered **MAJOR** hurricanes

## Tropical Cyclones: Development Areas and Movement





# Tropical Cyclone *Quick Reference Guide* 20

U.S. Navy Atlantic Tropical Web Site: <https://www.nlmoc.navy.mil>

Maritime Operations Watch Floor: 757.444.7750 DSN

Naval Meteorology & Oceanography Center - Norfolk, 9141 Third Ave, Norfolk VA 23511-2394 email: [cdo@nlmoc.navy.mil](mailto:cdo@nlmoc.navy.mil)

**Atlantic Tropical Cyclone Season: 01 June - 30 November**

**East Pacific Tropical Cyclone Season: 15 May - 30 November**

Tropical Cyclone Conditions of Readiness (COR) (time to onset of destructive winds*)		Sortie Conditions	Aircraft Evacuation Status Reports (required at the following times)	
<b>COR V</b>	96 hours	<b>Charlie</b> - Prepare to sortie within <b>48</b> hours	<b>48</b> hours	72 hours
<b>COR IV</b>	72 hours	<b>Bravo</b> - Expected sortie within <b>24</b> hours	<b>24</b> hours	48 hours
<b>COR III</b>	48 hours	<b>Alpha</b> - Commence sortie to sea		24 hours
<b>COR II</b>	24 hours			12 hours
<b>COR I</b>	12 hours			

\*Destructive winds are defined for each base. **Hampton Roads** defines destructive winds as **50 kts or greater**

## Environment al

## Requirement s for Tropical

- **Sea Surface Temperature** > 26 C/78 F with sufficient depth (approx 200ft) of warm water
- **Pre-existing disturbance** to trigger thunderstorm activity (frontal boundary, easterly wave, distal low pressure, etc...)
- **Divergence** at the Upper Levels (above the 400 mb level)
- Ample Planetary Vorticity (**Coriolis Force**) [disturbance located above 8 degrees North Latitude or below 8 degrees South Latitude]
- **Weak (< 20kts) vertical wind shear** between the surface and upper troposphere
- Relatively **moist layers at the**

## KEY TO TROPICAL CYCLONE WARNING GRAPHICS

The blue dashed line on the graphic indicates the **Ship Avoidance Area** associated with a storm. While the hurricane track connecting the forecast points is a useful tool, it is important to remember the uncertainty associated with a tropical cyclone track. The Ship Avoidance Area gives a projection of potential storm progress from the warning valid time for the next 24

The black and red lines indicate the projected tropical cyclone track. The black lines indicate the **34 knot, 50 knot, and 64 knot wind radii** associated with the storm at a given point. The outermost black line indicates the 34 knot radius, the red line indicates the 50 knot radius, and the inner black line shows the 64 knot radius. Since not all cyclones have the highest winds associated with them, weaker storms will not have a 64-knot radius (and possibly no 50-knot radius also.) The actual number of miles for the radius in each quadrant is listed in the associated Tropical Cyclone

